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C A

FIG 1 START STORE WAFER ID AND LAYER NAME FROM REVIEW APPARATUS 52 TO MAIN STORAGE DEVICE 62 VIA LOCAL AREA NETWORK 54 AND NETWORK 101 INTERFACE 65 SEARCH DEFECT MAP DATA FROM INSPECTION DATA DATABASE WITHIN AUXILIARY STORAGE DEVICE 63 BASED ON WAFER ID AND LAYER NAME -102WITHIN MAIN STORAGE DEVICE 62 AND THEN STORE THE DEFECT MAP DATA IN MAIN STORAGE DEVICE 62 READ FAILURE PROBABILITY DATA WITHIN AUXILIARY STORAGE DEVICE 63 BASED ON WAFER ID AND LAYER NAME WITHIN MAIN STORAGE DEVICE 62 AND -103THEN STORE FAILURE PROBABILITY DATA IN MAIN STORAGE DEVICE 62 CALCULATE DEFECT COUNT "N" OF DEFECT MAP DATA WITHIN MAIN STORAGE **DEVICE 62** 105 REPEAT FROM DEFECT #1 TO #N COMPARE X-AND Y-COORDINATES OF EACH DEFECT MAP DATA WITH BLOCK 106 COORDINATES OF FAILURE PROBABILITY DATA, THEN JUDGE BLOCK NAME AND WHETHER BLOCK EDGE OR NOT FOR EACH DEFECT, AND THEN STORE JUDGEMENT RESULT IN MAIN STORAGE DEVICE 62 CALCULATE FAILURE PROBABILITY BASED ON DEFECT DIAMETER OF FACH 107 DEFECT MAP DATA AND FAILURE PROBABILITY DATA AND THEN STORE THE FAILURE PROBABILITY IN MAIN STORAGE DEVICE 62 READ BLOCK NAME, DATA AS TO WHETHER BLOCK EDGE OR NOT, AND FAILURE 108 PROBABILITY WITHIN MAIN STORAGE DEVICE 62, AND THEN UPDATE DEFECT MAP DATA TO FAILURE PROBABILITY ADDED DEFECT MAP DATA 109 COMPLETE REPEATING AFTER EXECUTION OF DEFECT #N READ REVIEW CONDITION FILE WITHIN AUXILIARY STORAGE DEVICE 63 BASED ON WAFER ID AND LAYER NAME AND THEN STORE THE CONDITION IN MAIN STORAGE DEVICE 62 SORT DEFECT MAP DATA WITHIN MAIN STORAGE DEVICE 62 SO THAT DEFECT WITH HIGHEST FAILURE PROBABILITY COMES FIRST AND THEN STORE SORTED DEFECT MAP DATA IN MAIN STORAGE DEVICE 62 CLASSIFY DEFECT MAP DATA INTO DEFECTS TO BE REVIEWED AND THOSE NOT TO BE REVIEWED USING REVIEW CONDITION WITHIN MAIN STORAGE DEVICE 62, THEN SELECT DEFECTS TO BE REVIEWED, AND THEN STORE -112 RESULTS IN MAIN STORAGE DEVICE 62 TRANSFER SELECTED RESULTS WITHIN MAIN STORAGE DEVICE 62 TOWARD REVIEW APPARATUS 52 VIA NETWORK INTERFACE 65 AND LOCAL AREA NETWORK 54

END

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FIG.2

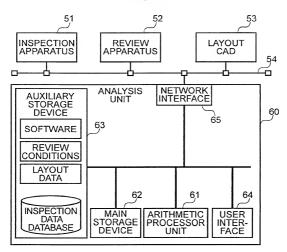


FIG.3

| _ | | | | | | | - |
|---|----------|-----------------|--------------|-----|------|--------------------|----|
| | NO., | CHIP COLUMN, | CHIP ROW, | X, | Υ, Ι | DEFECT DIAMETER | |
| ١ | 1, | 1, | 1, | 73, | 67, | 2.4 | 21 |
| ı | 2, 3, | 5, | 1, | 25, | 89, | 0.3 | |
| ١ | 3, | 4, | 2, | 47, | 69, | 1.5 | |
| 1 | 4, | 5, | 3, | 80, | 82, | 1.0 | |
| ı | 5, | 6, | 5, | 52, | 78, | 1.2 | |
| ı | 6, | 3, | 5, | 71, | 32, | 0.2 | |
| l | 7, | 3, | 7, | 87, | 90, | 0.7 | |
| ı | 8, | 2, | 6, | 77, | 38, | 0.3 | |
| l | 9, | Ο, | 4, | 83, | 45, | 8.0 | |
| ı | 10, | 2, | 3, | 49, | 9, | 1.9 | J |
| 1 | | | | | | ~ ~ | |

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FIG.4

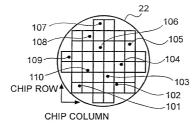
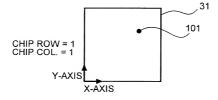


FIG.5



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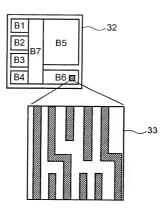
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FIG.6



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FIG.7

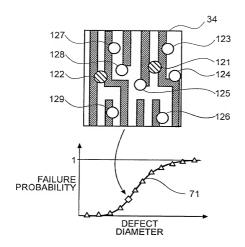
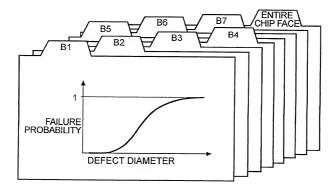


FIG.8



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FIG.9

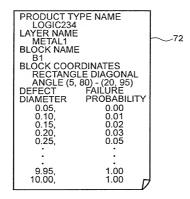
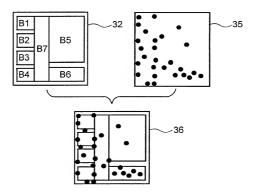


FIG.10



9,

10,

0,

2,

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> 83, 45.

49, 9, 1.9,

4,

3,

FIG.11

CHIP CHIP COL., ROW, BLOCK FAILURE SIZE, BLOCK, EDGE, PROBABILITY NO.. Χ, Y, 1, 1, 73, 67, 2.4, B5, no, 0.83 2, 3, 5, 1. 25, 89, 0.3, B1, 0.07 no, 47, 4, 2, 69. 1.5. B2. 0.26 no, 4, 5, 6, 7, 8, 5, 3, 80. 82. 1.0. B5. 0.38 no, 6, 5, 52, 78. 1.2. B5. yes, 0.50 3, 5. 71. 32. 0.2. B6. yes, 0.05 3, 7, 87, 90. 0.7. B5. 0.35 no. 2, 77, 6, 38, 0.3, B6, 0.07

0.8,

B5,

B7,

FIG.12

24

0.28

0.06

23

no,

no.

no,

| NO | CHIP COL | CHIP ROW. | Χ. | Y. | SIZE | BLOCK | BLOCK | FAILURE PROBABILITY |
|---------|-------------|--------------|-----|-----|------|-------|-------|------------------------|
| Į 14O., | | | ., | , | | | LDGL, | |
| 1, | 1, | 1, | 73, | 67, | 2.4, | B5, | no, | 0.83 |
| 5, | 6, | 5, | 52, | 78, | 1.2, | B5, | yes, | 0.50 |
| 4, | 5, | 3, | 80, | 82, | 1.0, | B5, | no, | 0.38 |
| 7, | 3, | 7, | 87, | 90, | 0.7, | B5, | no, | 0.35 |
| 9, | 0, | 4, | 83, | 45, | 0.8, | B5, | no, | 0.28 |
| 3, | 4, | 2, | 47, | 69, | 1.5, | B2, | no, | 0.26 |
| 8, | 2, | 6, | 77, | 38, | 0.3, | B6, | no, | 0.07 |
| 2, | 5, | 1, | 25, | 89, | 0.3, | B1, | no, | 0.07 |
| 10, | 2, | 3, | 49, | 9, | 1.9, | B7, | no, | 0.06 |
| 6, | 3, | 5, | 71, | 32, | 0.2, | B6, | yes, | 0.05 |
| | | | | | | | | |

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FIG.13

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| | CHIP | CHIP | | | | | BLOCK | |
|------|-------|------|-----|-----|-------|--------|--------------|-------------|
| NO., | COL., | ROW, | Χ, | Y, | SIZE, | BLOCK, | EDGE, | PROBABILITY |
| 1, | 1, | 1, | 73, | 67, | 2.4, | B5, | no, | 0.83 |
| 4, | 5, | 3, | 80, | 82, | 1.0, | B5, | no, | 0.38 |
| 7, | 3, | 7, | 87, | 90, | 0.7, | B5, | no, | 0.35 |
| 9, | 0, | 4, | 83, | 45, | 0.8, | B5, | no, | 0.28 |
| 3, | 4, | 2, | 47, | 69, | 1.5, | B2, | no, | 0.26 |
| | | | | | | | | |
| 1 | | | | | | | | |
| 1 | | | | | | | | |

FIG.14

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FIG.15

| CHIP | CHIP | | | | | BLOCK | |
|-------|-------------------------------|--|---|--|--|---|--|
| COL., | ROW, | Χ, | Y, | SIZE, | BLOCK, | EDGE, | PROBABILITY |
| 1, | 1, | 73, | 67, | 2.4, | B5, | no, | 0.83 |
| 6, | 5, | 52, | 78, | 1.2, | B5, | yes, | 0.50 |
| 5, | 3, | 80, | 82, | 1.0, | B5, | no, | 0.38 |
| 3, | 7, | 87, | 90, | 0.7, | B5, | no, | 0.35 |
| 0, | 4, | 83, | 45, | 0.8, | B5, | no, | 0.28 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | COL., 1, 6, 5, 3, | COL., ROW, 1, 1, 6, 5, 5, 3, 3, 7, | COL., ROW, X, 1, 1, 73, 6, 5, 52, 5, 3, 80, 3, 7, 87, | COL., ROW, X, Y, 1, 1, 73, 67, 6, 5, 52, 78, 5, 3, 80, 82, 3, 7, 87, 90, | COL., ROW, X, Y, SIZE, 1, 1, 73, 67, 2.4, 6, 5, 52, 78, 1.2, 5, 3, 80, 82, 1.0, 3, 7, 87, 90, 0.7, | COL., ROW, X, Y, SIZE, BLOCK, 1, 1, 73, 67, 2.4, B5, 6, 5, 52, 78, 1.2, B5, 5, 3, 80, 82, 1.0, B5, 3, 7, 87, 90, 0.7, B5, | COL., ROW, X, Y, SIZE, BLOCK, EDGE, 1, 1, 73, 67, 2.4, B5, no, 6, 5, 52, 78, 1.2, B5, yes, 5, 3, 80, 82, 1.0, B5, no, 3, 7, 87, 90, 0.7, B5, no, |

FIG.16

PRODUCT TYPE NAME LOGIC234 LAYER NAME METAL1 MAXIMUM DEFECT NUMBER 20 **OBJECT** FAILURE PROBABILITY 0.30 OR GREATER **EXCLUDED BLOCK EDGES B1, B2**

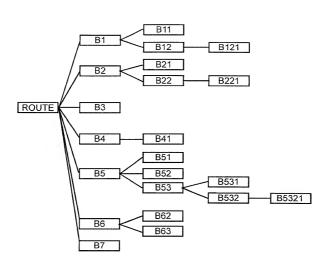
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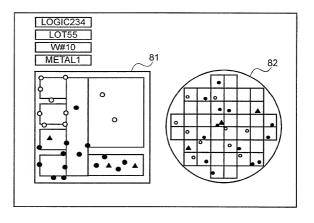
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FIG.17



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FIG.18



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FIG.19

